

MONTGOMERY COUNTY DEPARTMENT OF POLICE



**FALSE ALARM REDUCTION PROGRAM
2017 ANNUAL REPORT**

MARCH 2018

OVERVIEW

The False Alarm Reduction Section (FARS) of the Montgomery County Department of Police was created to administer Chapter 3A, Alarms, of the Montgomery County Code and reduce the number of false alarms that police must respond to each year. False alarms can take police officers and other public safety personnel away from other events, endangering responding authorities and the community, and wasting public resources.

In 2017, there were a total of **8,610 requests** for dispatch that police did not respond to consequently reducing the impact of false alarms on the quality of service and safety. This was a 18.2% decrease compared to 2016, which was due to issues associated with the transition to a new Computer Aided Dispatch (CAD) system. The time saved by Montgomery County Police not responding to these cancelled alarms equates to approximately **4,592 work hours¹**.

The number of new alarm users increased in 2017 as compared to previous years. There were about **6,600** new alarm users in 2017, which was about a **6.5%** increase as compared to 2016. In more than 22 years since the program was initiated, the section has consistently increased the number of alarm users who experience zero false alarms. **In 2017, over 79,000 alarm users, or 87.2%, had zero false alarms.**

Despite technical challenges affecting the section, the FARS was still able to reduce false alarms and increase the number of alarm users with zero false alarms – all positive signs. The *total* number of registered alarm users continues to rise, and despite the significant increase in registered users and the need to respond to more calls in 2017, police officers responded to *fewer* alarm calls in 2017 compared to 1994, when enforcement of the amended burglar alarm law went into effect. These statistics, coupled with a 207% increase in the number of registered alarm users over the same period, demonstrates that substantial and *sustained* false alarm reduction has been achieved.

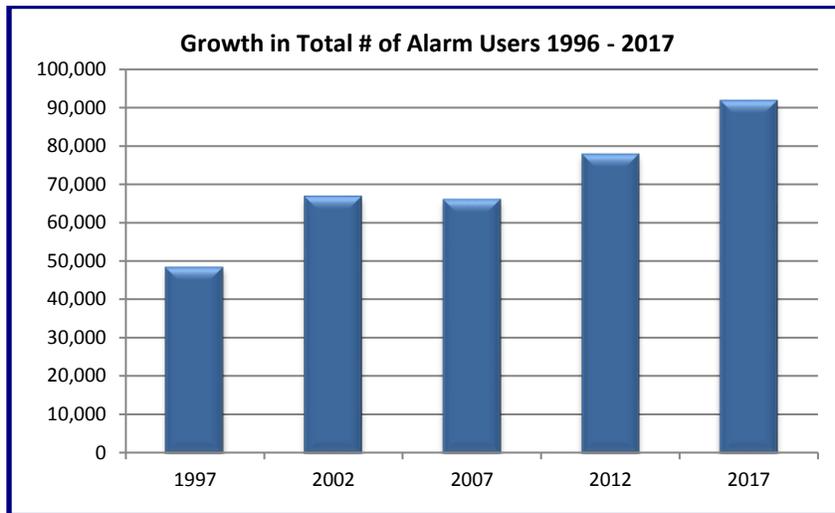
The FARS staff plans to continue its amplified enforcement initiative and remain in the forefront as subject matter experts in the field of false alarm management and reduction.

2017 FALSE ALARM REDUCTION

Alarm Users

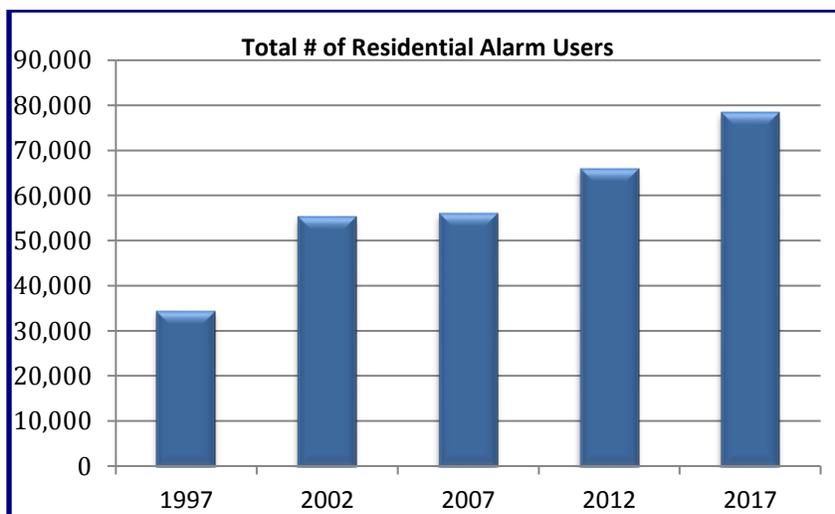
Montgomery County is the most populous jurisdiction in the state of Maryland, consisting of nearly 1.1 million residents. In 2017, FARS received a total of 6,628 new alarm user registration forms (residential and commercial). There was a 6.0% increase in the total number of registered alarm users between 2016 and 2017, accounting for more than 91,400 users.

¹ This figure is based on the average time of 16 minutes each, for two officers per alarm call.



The alarm user registration renewal process permits FARS to keep the alarm user database current by removing those users who no longer have an alarm system or have moved from the County. This allows FARS to perform statistical analysis using more accurate numbers, which provides for more meaningful reporting.

Overall, Montgomery County has experienced an increase in total alarm registrants since 1994 (207%), driven primarily by the number of residential alarm users – more than 80,700 users - an increase of 175% since 1995.

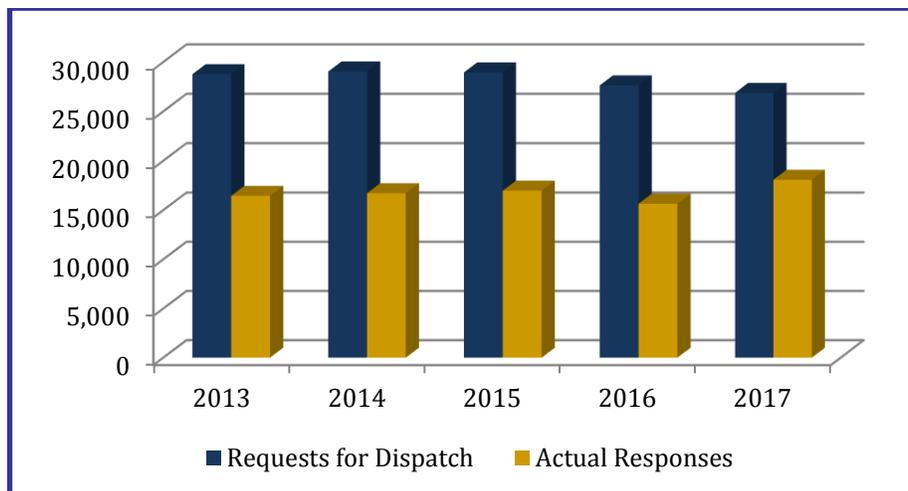


Alarm Responses

A false alarm is an alarm system activation that results in a dispatch request that is not cancelled prior to the arrival of law enforcement at the site, and in which the responding authority finds no evidence of criminal activity to justify a police response. There are several common causes of false alarms:

- Inadequate training of those allowed access to the system. This also includes accidental alarms caused by house/pet sitters, house cleaners, contractors, etc.
- Pets.
- Weak or depleted system batteries.
- Open, unlocked, loose fitting or defective door/window sensors.
- Drafts from air conditioners/heaters, or open windows that cause movement of plants, curtains, etc.

The graph below offers visual representation of the number of requests for dispatch versus actual responses. *Requests for dispatch* include the number of times an alarm monitoring company calls 9-1-1. *Actual response* totals include the number of times an officer actually arrives at a location and investigates the cause of the alarm. Alarm companies are required to cancel police response when it is determined that alarm activation is false, or response is not needed. **In 2017, alarm companies cancelled 6,381 requests for dispatch, or 24% of the total requests for dispatch.** These cancellations provided officers with more time to engage in other more critical law enforcement related activities and community policing initiatives.



Historically, the number of dispatch requests has been declining: the numbers have dropped about 39% over the last 20 years and 10.3% over the last five years. In 2017, the number of dispatch requests dropped slightly, about 2.7%, from 27,623 to 26,867. The number of actual responses to alarm calls increased by about 2,400, which was an increase of about 15.5% in 2017 as compared to 2016. This increase was due to technical issues with a conversion of a database the FARS is integrated with. To ensure the citizens of the county were served properly, a decision was made to respond to all calls for about an 8-month period. As a result, the percentage of dispatch requests that resulted in response was abnormally high (67.3%) in 2017 as compared to 2016 where the percentage was 56.6%. This number will decrease significantly in the year to come, as all technical issues have been resolved.

False Alarm Rates

The false alarm rate is the most common measure of false alarm reduction, as it calculates the number of false alarm dispatches relative to the total number of alarm users.

Year	Total Registered Users	Total False Alarms	False Alarm Rate
1994	29,756	42,821 ²	1.44
1999	58,143	24,400	.42
2004	63,748	17,624	.28
2009	71,011	16,816	.24
2017	89,542	15,165	.17

This table demonstrates that although the total number of registered users has increased over the last twenty years, the false alarm dispatch rate has continued to drop. Montgomery County's dispatch rates remain among the lowest in the country.

Another measure of program effectiveness is the total number of alarm users who had NO false alarms. In 2017, a total of 79,539 alarm users had ZERO false alarms; essentially, 88.8% of all alarm users in Montgomery County successfully managed their alarm systems. In 1995, the year after the county alarm code was implemented, only 56.2% of the registered alarm users had no false alarms. This is a significant improvement, given the increase in the total number of users. The chart below represents the false alarm numbers over the last two decades.

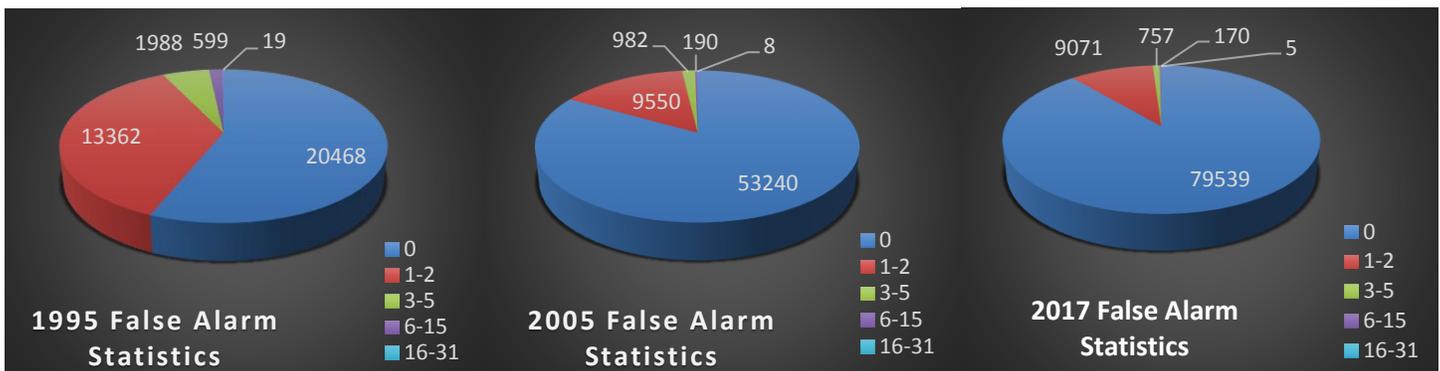
2017 <i>Total Users = 89,542</i>		2005 <i>Total Users = 63,970</i>		1995 <i>Total Users = 36,436</i>	
False Alarms	Alarm Users	False Alarms	Alarm Users	False Alarms	Alarm Users
0	79,539	0	53,240	0	20,468
1-2	9,071	1-2	9,550	1-2	13,362
3-5	757	3-5	982	3-5	1,988
6-15	170	6-15	190	6-15	599
16-31	5	16-31	8	16-31	19

A closer examination reveals that commercial alarm users have improved 228% since 1995 towards the achievement of no false alarms, while residential users have been 296% more successful in managing false alarms. In 1995, nearly 7% of all commercial alarm users had six or more false alarms. In 2017, commercial alarm users accounted for about 93% of the users with six or more false. On the residential side there were about 13 alarm users or 7% that accounted for six or more false alarms. The numbers were roughly the same in 2016.

² The number of verified calls for 1994 is unknown. 42,821 is the total number of alarm dispatches that occurred.

Number of Users with No False Alarms				
	1995	2005	2017	% Change
Commercial	2,352	5,730	7,717	228.00
Residential	18,116	47,510	71,822	296.50

The charts below graphically show that more alarm users (as a percentage of total alarm users for a given year) are achieving the zero false alarm thresholds. This statistic, which is supported by the low false alarm rate, is indicative of the success of the overall false alarm reduction program. These reductions become more significant when viewed with the steady increase in the number of alarm users each year. This is a positive measure of the program's impact on County resources.



Cost Avoidance

As a direct result of the FARS' strict enforcement of the alarm law, there were 8,610 alarm calls that police officers were not required to respond to in 2017. Using the averages established by the Police Department, this equates to approximately **4,592 hours of police officer time, or an estimated \$972,930 in cost avoidance**. Monetary cost avoidance is based on an average salary cost³ of \$113. Work year savings are based on an average of 16 minutes per alarm response by two officers.

REVENUE

The charts on the next two pages reflect revenue collected by the FARS for alarm user registration and renewal fees, false alarm response fees, alarm business license and administrative fees, civil citations, and appeal filing fees.

The first chart covers *calendar* year 2017. The second chart covers *fiscal* year 2017. The FY2017 chart is included only as a reference because budget projections are based on fiscal rather than calendar years. The more accurate chart is the calendar year 2017 chart, as false alarms and the resultant false alarm response fees are calculated on a calendar year basis.

³ Includes fringe benefits, operating expenses and vehicle but does not include costs related to policing, such as training, the cost of dispatching, etc.

CALENDAR YEAR 2017	ACTUAL REVENUES
<u>Alarm User Registration Fees</u>	
Residential	\$176,320
Commercial	<u>16,085</u>
TOTAL	\$192,405
<u>Alarm User Registration Renewal Fees</u>	
Residential	\$180,081
County Attorney Collections	<u>1,305</u>
Total Residential	\$181,386
Commercial	\$ 26,669
County Attorney Collections	<u>855</u>
Total Commercial	\$27,524
TOTAL	\$208,910
<u>False Alarm Response Fees</u>	
Residential	\$ 61,735
County Attorney Collections	<u>14,070</u>
Total Residential	\$ 75,805
Commercial	\$317,387
County Attorney Collections	<u>59,503</u>
Total Commercial	\$376,890
TOTAL	\$452,695
<u>Alarm Business Fees</u>	
License	\$ 70,316
Civil Citations	290,100
Administrative Fees	<u>0</u>
TOTAL	\$360,416
<u>Appeal Filing Fees</u>	
Residential	\$ 15
Commercial	<u>45</u>
TOTAL	\$ 60
GRAND TOTAL	\$1,214,486

FISCAL YEAR 17	ACTUAL REVENUES
<u>Alarm User Registration Fees</u>	
Residential	\$189,564
Commercial	<u>17,185</u>
TOTAL	\$206,749
<u>Alarm User Registration Renewal Fees</u>	
Residential	\$190,001
County Attorney Collections	<u>705</u>
Total Residential	\$190,706
Commercial	\$25,044
County Attorney Collections	<u>565</u>
Total Commercial	\$25,609
TOTAL	\$216,315
<u>False Alarm Response Fees</u>	
Residential	\$ 64,184
County Attorney Collections	<u>7,005</u>
Total Residential	\$ 71,189
Commercial	\$390,776
County Attorney Collections	<u>20,250</u>
Total Commercial	\$411,026
TOTAL	\$482,215
<u>Alarm Business Fees</u>	
License	\$ 70,800
Civil Citations	261,850
Administrative Fees	<u>00</u>
TOTAL	\$ 332,650
<u>Appeal Filing Fees</u>	
Residential	\$ 00
Commercial	<u>15</u>
TOTAL	\$ 15
GRAND TOTAL	\$1,237,944

CALENDAR YEAR COMPARISON	ACTUAL REVENUES		
	2015	2016	2017
<u>Alarm User Registration Fees</u>			
Residential	\$158,825	\$167,389	\$176,320
Commercial	<u>17,970</u>	<u>16,940</u>	<u>16,085</u>
TOTAL	\$176,795	\$184,329	\$192,405
<u>Alarm User Registration Renewal Fees</u>			
Residential	\$258,780	\$192,555	\$180,081
County Attorney Collections	<u>1,228</u>	<u>1,015</u>	<u>1,305</u>
Total Residential	\$260,008	\$193,570	\$181,386
Commercial	\$31,895	\$29,582	\$26,669
County Attorney Collections	<u>170</u>	<u>320</u>	<u>855</u>
Total Commercial	\$32,065	\$32,065	\$27,524
TOTAL	\$292,073	\$223,472	\$208,910
<u>False Alarm Response Fees</u>			
Residential	\$100,343	\$ 74,383	\$ 61,735
County Attorney Collections	<u>9,153</u>	<u>9,482</u>	<u>4,070</u>
Total Residential	\$109,496	\$ 83, 865	\$ 75,805
Commercial	\$441,547	\$416,730	\$317,387
County Attorney Collections	<u>22,942</u>	<u>17,385</u>	<u>59,503</u>
Total Commercial	\$464,489	\$434,115	\$376,890
TOTAL	\$573,985	\$517,980	\$452,695
<u>Alarm Business Fees</u>			
License	\$ 56,400	\$ 65,024	\$ 70,316
Civil Citations	112,500	191,750	290,100
Administrative Fees	<u>464</u>	<u>0</u>	<u>0</u>
TOTAL	\$169,364	\$256,774	\$360,416
<u>Appeal Filing Fees</u>			
Residential	\$315	\$120	\$ 15
Commercial	<u>105</u>	<u>15</u>	<u>45</u>
TOTAL	\$420	\$135	\$ 60
GRAND TOTAL	\$1,212,637	\$1,182,690	\$1,214,486

Collection of false alarm response fees is always a priority for the FARS. Strict enforcement of this aspect of the alarm law clearly shows that Montgomery County is serious about the issue of false alarms. This tool is the ability to place accounts, that alarm users fail to remit the required false alarm response fees, into a denied response status. Denied response means the police will not respond to an alarmed location until the alarmed location's financial obligation is satisfied. Along with the denied response status, accounts are referred to the Office of the County Attorney for collection action.

The FARS collection rate was down slightly from 91% in 2016 to 89% in 2017. The combination of the Office of the County Attorney as the FARS Collector and suspension of police response provisioned in Chapter 3A, Alarms, for failure to remit false alarm response fees greatly enhances the FARS ability to collect on unpaid bills. In 2017, staffing was at full complement resulting in a positive impact on the FARS ability to place alarm users in denied response. The effort to place alarm users in denied response was unable to be completed regularly but in 2017 the FARS was able to return this process back to normal operations.

The following chart reflects the amount billed for false alarm response fees in 2017 versus the amount collected for both residential and commercial alarm users. Please note that the “collected” amount in the following chart reflects payments made against false alarms that occurred in 2017. The actual collection of monies for those calendar year 2017 false alarms extends into calendar year 2018, therefore reflects different totals than the Calendar Year Revenue Chart. Further, this chart concentrates on calendar year 2017 and does not account for monies received from accounts that owed for previous years.

Calendar Year 2017 Billed v. Collected False Alarm Response Fees				
False Alarm Response Fees	Billed	Collected*	Past Due (>30 & <51 days overdue)	Delinquent (>50 days overdue)
Commercial	\$369,475	\$ 325,800	\$ 290	\$ 31,625
Residential	\$ 80,615	\$ 75,875	\$ 120	\$ 20,365
Total	\$450,090	\$401,675	\$ 410	\$51,990

**Represents fees collected in 2017 and 2018 against false alarm response fees billed in 2017.*

The FARS is in the process of attempting to collect the past due amounts listed above. The FARS has sent the overdue notices to all affected alarm users. The \$51,990 listed above will be referred to the Office of the County Attorney for collection in early 2018 and the affected alarm users will be placed in a non-response status until payment is received.

CONCLUSION

Overall, the 2017 Annual Report on the status of the False Alarm Reduction Program is positive. In 2017, the revenue increased slightly by about 2.7% as compared to 2016, the number of dispatch requests from the alarm companies has declined 39.0% since 1994, and the total number of responses has declined 58% over the same time. This number is slightly higher than 2016. The root cause of the increase was the transition to a new CAD system that integrates with the FARS false alarm tracking and billing system. However, even with these circumstances, alarm companies are better managing and vetting the alarm systems they install or monitor and homeowners have become more responsible with their alarm systems.

The FARS will continue its strict enforcement of all requirements for requesting dispatch, including providing the correct alarm user registration and alarm business license numbers. The legally mandated non-response provisions of the alarm law resulted in 1,027 requests for dispatch that were denied as a result of the violation status of the alarm user or alarm business. This represents only 3.8% of all requests for dispatch in 2017 and is a slight decrease as compared to 2016, where the percentage was 5.5%.

There must be continuing education performed and early intervention with alarm users who are experiencing false alarms, so they do not reach unacceptable thresholds and waste valuable resources. In 2017 the FARS began enforcing the major offender project, which reaches out to alarm users experiencing excessive false alarms. The major offender project is instrumental in ensuring that alarm users experiencing excessive false alarms are educated about their alarm system and the impact to police resources. The number of alarm users that exceeded the 16 to 31 false alarm counts in a calendar year decreased for commercial alarm users in 2017 and there were no residential alarm users in this category. In 2018, the FARS staff will ramp up its efforts to intervene and educate alarm users that fall into this category quickly and expeditiously to ensure we continue to reduce the number of alarm users in this range.

In April 2017, the Emergency Communications Center (ECC) went live with their Motorola Premier One CAD system. The FARS worked cohesively with the ECC to identify and remedy any discrepancies between our current CryWolf false alarm tracking and billing system and the new Motorola Premier One CAD system. Due to integration issues between the two systems, management mandated that police be dispatched to all alarm calls regardless of stipulations set forth by Chapter 3A, **Alarms**, of the Montgomery County Code. As a result, Police officers responded to just over 2,400 (15.5%) more false alarm calls in 2017 than in 2016. This effort was put in place to ensure the citizens of Montgomery County were properly served while the technical discrepancies between the two systems were resolved.

The FARS staff, initiated contact with the Patrol Services Bureau (PSB), to identify and share patterns observed throughout the year. Through this discussion, FARS was able to express what the needs of the unit were and what was required of PSB to assist FARS in achieving the overall goal in reducing false alarms, reducing the workload of officers so that they can focus on other goals initiatives, and assisting PSB in other administrative areas. With the support in compliance from the patrol units, FARS was able to engage more users in a timelier fashion to reduce false alarms. FARS also engaged the alarm companies to assist in this effort. FARS continues to partner with PSB in increasing compliance in administrative responsibilities to achieve each bureau's goals.

Looking ahead to 2018, we will be reviewing the alarm law Chapter 3A, Alarms and the Executive Regulation to determine what updates may need to be considered to ensure both the law and executive regulation are current with today's standards. Furthermore, the FARS is pioneering new strategies to reduce wasted allocation of resources by increasing instruction to involved stakeholders, to include the ECC and PSB, identifying targeted discrepancies, and engaging users and alarm companies with timely correspondence.